



Microcontrollers(4rd year)

Sheet 8

Answer the following questions:

(1) For XTAL =11.0592MHz, find the TH1 value (in both decimal and hex) for the following baud rates.

- (a) 9,600**
- (b) 4,800**
- (c) 1,200**
- (d) 300**
- (e) 150**

(2) Write an 8051 program to transfer serially the letter “Z” continuously at 1,200 baud rate.

(3) Write an 8051 program to transfer serially the message “The earth is but one country and mankind its citizens” continuously at a 57,600 baud rate.

(4) In a given situation we cannot accept reception of any serial data. How do you block such a reception with a single instruction?

(5) Write a C program (set the baud rate at 4800) to do the following:

- Receive data serially and send it P1**
- Read port P2, transmit data serially, and give a copy to P3**